

Ar



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,089	02/16/2001	Jean-Jacques Born	ICB0096	3232

24203 7590 07/10/2003

GRIFFIN & SZIPL, PC  
SUITE PH-1  
2300 NINTH STREET, SOUTH  
ARLINGTON, VA 22204

EXAMINER
----------

GOODWIN, JEANNE M

ART UNIT	PAPER NUMBER
----------	--------------

2841

DATE MAILED: 07/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application N .

09/784,089

Applicant(s)

BORN ET AL. 

Examiner

Jeanne-Marguerite Goodwin

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the microprocessor, the second electronic circuit and the diode as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Art Unit: 2841

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second electronic circuit as stated in claim 3 and the diode as stated in claim 13 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Specification*

5. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or  
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.

Art Unit: 2841

- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

In this case, headings need to be added to the specification.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 4-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention: the amplification and conversion means as stated in claim 4; the filtering means as stated in claim 5; and the inverter as stated in claim 8; the polarization resistor as stated in claim 10. The above elements are stated in the specification but the function of these such elements are not clear.

Claims 6, 7, and 9 are rejected to as being dependent upon a rejected claim.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2841

9. Claims 1-15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim the phrase “such as” renders the claim indefinite since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See *Ex parte Steigewald*, 131 USPQ 74.

Claims 2-15 are rejected to as being dependent upon a rejected base claim.

### ***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1 and 2 rejected under 35 U.S.C. 102(b) as being anticipated by JP Patent 401270694A to Murakami et al. [hereinafter Murakami].

Murakami discloses an electronic clock comprising a case (31) formed of a top portion including a crystal covering a display means and a bottom portion delimited by a back cover located below the display means, a piezoelectric element (33) generating an electric voltage when mechanical pressure is exerted on the top portion and a first timer/electronic circuit (41) arranged inside the case and starting an operation in response to an output signal of the sensor circuit, wherein the piezoelectric transducer is arranged in the bottom portion of the case and is bonded to the case.

12. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Development of Electronic Watch With A Built-in Shock Sensor [herein Prior Art].

Prior Art discloses an electronic watch comprising a case, a glass, a watch module, a piezoelectric for shock detection and a piezoelectric element for buzzer, wherein both piezoelectric elements attached to the back cover, a piezoelectric elements generating an electric voltage when mechanical pressure is exerted on the top portion and an electronic circuit arranged inside the case and starting an operation in response to an output signal of one of the piezoelectric element, and wherein the piezoelectric elements are arranged in the bottom portion of the case and is bonded to the case.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 3-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami in view of US Patent 4,242,745 to Mutrux.

Murakami discloses a device as stated above with regards to claims 1 and 2 as stated above. Murakami discloses all the subject matter claimed by applicant with the exception of the limitation stated in claim 3, i.e., a second electronic circuit; the limitation stated in claim 7, i.e.,

Art Unit: 2841

the particular type of filter, e.g., digital filter, a filter with switched capacitors or made with an active filter; the limitation stated in claim 8, i.e., wherein the amplification and conversion means include a circuit branch in which a transistor and a resistor are mounted in series and an inverter connected in parallel across the circuit branch; the limitation stated in claim 9, i.e., the particular type of inverter, e.g., CMOS type; and the limitation stated in claim 10, i.e., a polarization resistor.

With respect to the limitation stated in claim 3: Mutrux discloses an electronic timepiece comprising a casing having a piezoelectric transducer (9), a first/timing circuit (4) which will generate a logic signal in response to the pressure exerted and a second/alarm circuit (2) which causes the piezoelectric transducer to operate as a vibration source for an acoustic generator, and a series of capacitors, resistors, transistors to acts as an amplifier, converter, inverter, filtering means and switching means. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add the second/alarm circuit arrangement, as taught by Mutrux, to the electronic clock, as taught by Murakami, in order to be able to indicate an alarm time, as already suggested by Mutrux.

With respect to the limitation stated in claim 7: Official Notice is taken with respect to the particular type of filter, e.g., digital filter, a filter with switched capacitors or made with an active filter means, since it is very well known in the art that these particular filters are one of numerous filters used to filter acoustic pulses generated by an piezoelectric transducer. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to replace the filtering means as disclosed by Mutrux with any of the claimed since they are alternative types of filtering elements which will provide the same



Art Unit: 2841

function, if one is replaced with the other, of filtering acoustic pulses generated by the transducer.

With respect to the limitation stated in claim 8: Official Notice is taken with respect to the particular type of amplification and conversion means, e.g., a circuit branch in which a transistor and a resistor are mounted in series and an inverter connected in parallel across the circuit branch, since it is very well known in the art that this type of amplification and conversion means is one of numerous amplification and conversion means used to amplify and convert an acoustic pulses generated by an piezoelectric transducer. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to replace the amplification means as disclosed by Mutrux with the claimed amplification and conversion means since both are alternative types of amplification and conversion elements which will provide the same function, if one is replaced with the other, of amplifying and converting an acoustic pulses generated by the transducer.

With respect to the limitation stated in claim 9: Official Notice is taken with respect to the particular type of inverter means, e.g., CMOS, since it is very well known in the art that this type of inverter means is one of numerous inverter means used to invert an acoustic pulses generated by an piezoelectric transducer. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to replace the inverter means as disclosed by Mutrux with the claimed inverter means since both are alternative types of inverter elements which will provide the same function, if one is replaced with the other, of inverting an acoustic pulses generated by the transducer.

Art Unit: 2841

With respect to the limitation stated in claim 10: Official Notice is taken with respect to the particular type of resistor, e.g., polarization, since it is very well known in the art that this type of inverter means is one of numerous inverter means used to invert an acoustic pulses generated by an piezoelectric transducer. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to replace the inverter means as disclosed by Mutrux with the claimed inverter means since both are alternative types of inverter elements which will provide the same function, if one is replaced with the other, of inverting an acoustic pulses generated by the transducer.

15. Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Murakami and Mutrux as applied to claims 3-10 above, and further in view of US Patent 6,577,559 to Fleury et al. [hereinafter Fleury].

The combination to Murakami and Mutrux disclose a device as stated above with regards to claim 3-10. Murakami and Mutrux disclose all the subject matter claimed by applicant with the exception of the limitations stated in claim 11, i.e., a switching means, a means for supplying a voltage, and a coil connected between the means supplying the voltage and the switching means; the limitation stated in claim 12, i.e., a capacitor mounted between the coil and the transducer; the limitation stated in claim 13, i.e., a diode connected in series with the coil; the limitation stated in claim 14, i.e., the switching means formed of a transistor operating in switching mode; and the limitation stated in claim 15, i.e., the particular type of transistor, e.g., bipolar.

Art Unit: 2841

With respect to the limitations stated in claims 11-14: Fleury discloses a sound generating circuit comprising a switching means, a means for supplying a voltage, and a coil connected between the means supplying the voltage and the switching means, a capacitor mounted between the coil and the transducer, a diode connected in series with the coil, and wherein, the switching means is formed of a transistor operating in switching mode. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to replace the second electronic/alarm circuit, as taught by the combination of Murakami and Mutrux, with the sound generator, as taught by Fleury, since both are alternative types of alarm circuits which will provide the same function, if one is replaced with the other, of generating an alarm sound.

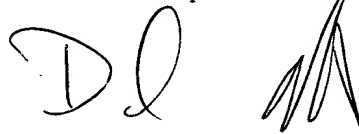
With respect to the limitation stated in claim 15: Official Notice is taken with respect to the particular type of transistor, e.g., bipolar, since it is very well known in the art that this type of transistor is one of numerous transistor means used as a switching means in piezoelectric transducers. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to replace the transistor as disclosed by the combination of Murakami, Mutrux and Fleury, since both are alternative types of transistor element which will provide the same function, if one is replaced with the other, of acting as a switching means upon receiving a signal.

### *Conclusion*

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 disclose related devices.

Art Unit: 2841

17. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Jeanne-Marguerite Goodwin whose telephone number is (703) 305-0264. The examiner can normally be reached on Monday-Friday (9am-6pm), alternate Fridays off. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to read 'DM' followed by a stylized flourish.

JMG  
June 30, 2003

DAVID MARTIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800